

## MathPanel for Microsoft Word

Ever since Microsoft Word 2 (and much of this code actually came from that time, I use field codes) I have preferred to make my own macros for doing my math work in Word. I have had little or no tolerance for their other method of doing math which was very clunky and slow and don't do what one actually wants. So, here is my current version of MathPanel that I use for my own electronic publishing. It is a multipage form. The Ops page looks like this.

At the top of the form I have two boxes called Superscript and Subscript. What they will do is: if it write  $2AB^4 + XY^2 - 3 = MX$  and select it and then push that button, I get

$$2AB^4 + XY^2 - 3 = MX$$

or with partial and full radical

$$\sqrt{AB^4 + XY^2 - 3} = MX$$

$$\sqrt{2AB^4 + XY^2 - 3} = MX$$

If I put in a comma, then it has to be used singly as it will use the comma to make a fraction

$2AB_4,XY_2 - 3$  becomes  $\frac{2AB^4}{XY^2 - 3}$ . The subscript button works exactly the same way except  $2AB_4,XY_2 - 3$  becomes  $\frac{2AB_4}{XY_2 - 3}$ .

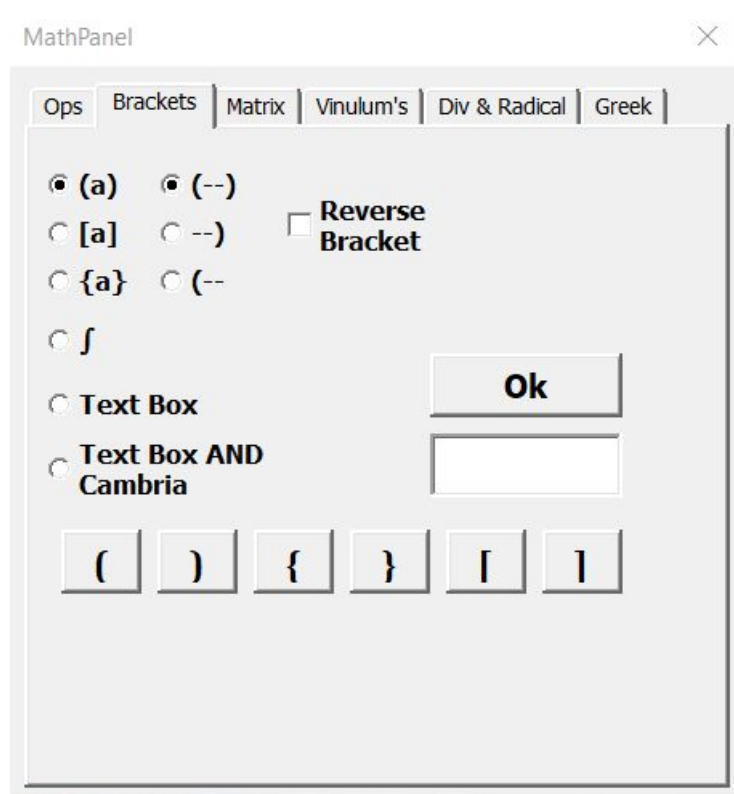
*Also, if you select a period, it will treat it as a decimal point.*

The *small caps* is self-explanatory. When working with OCR results, those will either be all large caps, a combination, or just a mess.

THIS IS A TEST becomes THIS IS A TEST. Just one button instead of crawling through drop down menus.

There is one button on this page, with the text +,~ and that is because Heath made a symbol I have never seen before, so I made a macro for it, pushing that button you get ±.

The second page is called Brackets.



And you can choose your brackets either one side, or both, and even reverse them, the lower buttons are on your keyboard already, but sometimes these are quicker.

$\left(\frac{2AB^4}{XY^2-3}\right)\left[\frac{2AB^4}{XY^2-3}\right]\left\{\frac{2AB^4}{XY^2-3}\right\}$  or if one use the text box and put anything they

want in it, we get  $\mathbf{B}\frac{2AB^4}{XY^2-3}\mathbf{B}$ .

The next page is the Matrix page, and again, it is delimited using the comma. Using it may take practice getting the alignment effect you want, but remember this, although it may turn out looking skewed in Word, printed to Adobe, it prints correctly.

MathPanel

Ops | Brackets | Matrix | Vinulum's | Div & Radical | Greek

Enter Number of Columns

Enter Vertical Spacing

Enter Horizontal Spacing

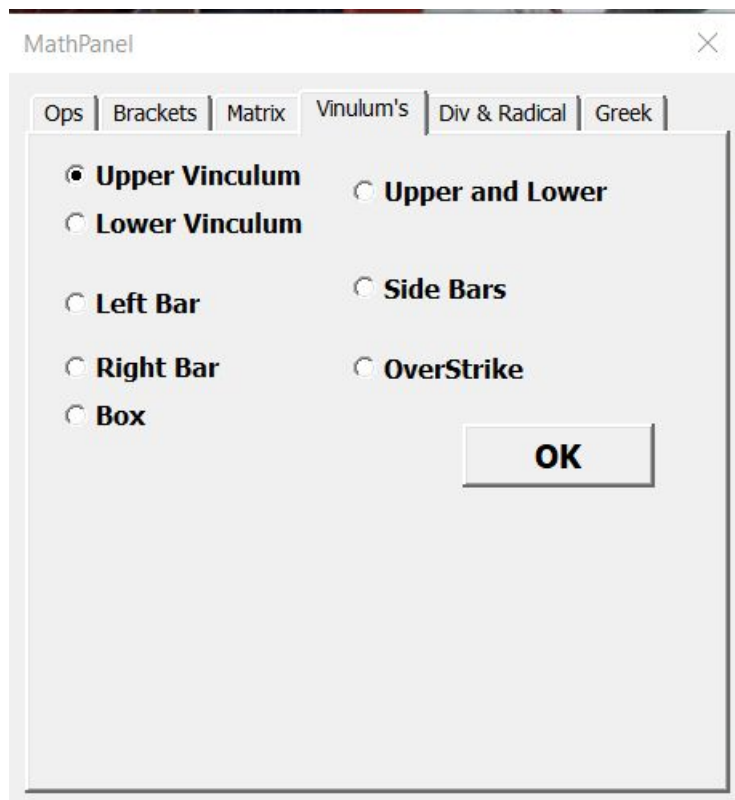
☒ Right Align  
☐ Center  
☐ Left Align

Ok

abc,def,ghi,jkl becomes if I tell it 2 columns (or Columns if you stay up too long)  $\begin{array}{cc} abcdef \\ ghi\ jkl \end{array}$  and then you can do things with boxes like  $\boxed{\begin{array}{cc} abcdef \\ ghi\ jkl \end{array}}$ .

The Vincum page can take this and do things like,

given  $B_{\frac{2AB^4}{XY^2-3}}$  then  $B_{\frac{2AB^4}{XY^2-3}}$   $B_{\frac{2AB^4}{XY^2-3}}$   $B_{\frac{2AB^4}{XY^2-3}}$



The division box, I rarely use, and it may look like this,

1234 becomes  $\underline{1234}$ , or  $\overline{1234}$ , or  $\text{f}1234$ .  $\text{fB}\frac{2AB^4}{XY^2-3}\text{B}$

partial radical full radical have buttons on the Ops page, but if one needs to add the degree, then it can be done here

MathPanel

Ops | Brackets | Matrix | Vinulum's | Div & Radical | Greek

☐ Synthetic Division  
☐ Long Division  
☐ Function Brace

Ok

**Partial Radical**

3 4 5 6 7 8 9

**Full Radical**

3 4 5 6 7 8 9

The last page is just Greek to me, and you may note that you can actually change the output of buttons like these by simply changing the button text itself because that is what is going to come out. The code simply takes the button text and puts it on your page.



There is one other button I use a lot but it is not on the MathPanel, it is at the top of my Word ribbon bar, It is My Italic. If you use the dumb italic button, you will spend all day trying to italicize things correctly because that button will italicize, and incorrectly so, everything. My Italic takes the text, but **do not use it on field codes** as it will trash them, and sorts it all out and lays it back down in place.

For example

The (123) is where, and when, we meet.

is this using Microsoft's button,

*The (123) is where, and when, we meet.*

and this using My Italic.

*The (123) is where, and when, we meet.* Somewhat like you actually find in most books.

The code for the button is this:

```
Sub Italic_Sort()  
Dim N:: Dim A  
Dim count_  
Dim B  
A = Selection()  
N = Len(A)  
If N < 2 Then Exit Sub  
For count_ = 1 To N  
    B = Mid(A, count_, 1)  
  
    Select Case AscW(B)  
        Case 65 To 90, 97 To 122, 8242 [8242 is the character for prime]  
            Selection.Font.Italic = True  
            Selection.TypeText Text:=B  
  
        Case Else  
            Selection.Font.Italic = False  
            Selection.TypeText Text:=B  
  
    End Select  
Next  
    Selection.Font.Italic = False  
End Sub
```

So, wrapping all this up, my macro's are built for output, speed and ease of use. The panel itself, on a large screen, sits beside Word work with Adobe at the



top as I abstract and format what I will use in my work. Generally make macro's like this for repetitive tasks.

I remember when Word 2 came out and a mag was comparing it with Ami Pro granting that Ami was better, I wrote them pointing out what Word Basic could do for Word, and chewed them out. The next month they printed a retraction and gave Word the thumbs up. I still have my Word 2 saved on backup. I may have made help files for a site or two with it. One site for a Sanskrit grammar help file, and another for Lincoln Douglas Debating.

Editing requires some ability making and using macro's.